



TECHNICAL SERVICE BULLETIN

Lack Of Heat Or Cooling From The Cabin Vents - Temperature Door Or Door Actuator Binding/Inoperative - DTC B1081:07

20-

2236

15 July 2020

Model:

Ford 2015-2019 F-150
2017-2019 F-Super Duty

Issue: Some 2015-2019 F-150, 2017-2019 F-Super Duty vehicles may exhibit a lack of heat or cooling from the cabin vents when the climate settings are adjusted between hot and cold. This may be due to a stuck/binding temperature door within the climate control housing or binding/inoperative temperature door actuator. Diagnostic trouble code (DTC) B1081:07 may be present in the front controls interface module (FCIM). To correct the condition, follow the Service Procedure steps to remove the climate control housing and replace the temperature door actuator(s) and/or lubricate the temperature blend door bearing surface.

Action: Follow the service procedure steps to correct the condition on vehicles that meet all of the following criteria:

- One of the following vehicles:
 - 2015-2019 F-150
 - 2017-2019 F-Super Duty
- Lack of heat or cooling from the cabin vents when the climate settings are adjusted between hot and cold
- Only DTC B1081:07 stored in the FCIM

NOTE: Part quantity refers to the number of that service part number required, which may be different than the number of individual pieces. Service part numbers contain 1 piece unless otherwise stated. "As Needed" indicates the part is required but the number may vary or is not a whole number; parts can be billed out as non-whole numbers, including less than 1.

Parts

Part Number		Description	Quantity
FL3Z-19E616-B	Package Contains 1 Piece, 1 Piece Required For Manual Climate Control, 2 Pieces Required For Dual Automatic Climate Control	Temperature Door Actuator	1 For Manual Climate Control, 2 For Dual Automatic Climate Control
FL3Z-19788-A	-	Lower Cam	1
FL3Z-19788-B	-	Upper Cam (Dual Automatic Climate Control)	1
W714409-S439	-	Steering Column Bolt	1
XG-17	-		As Needed

	Motorcraft® HVAC Duct Component Grease	
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Warranty Status: Eligible under provisions of New Vehicle Limited Warranty (NVLW)/Service Part Warranty (SPW)/Special Service Part (SSP)/Extended Service Plan (ESP) coverage. Limits/policies/prior approvals are not altered by a TSB. NVLW/SPW/SSP/ESP coverage limits are determined by the identified causal part and verified using the OASIS part coverage tool.

Labor Times

Description	Operation No.	Time
2015-2019 F-150, 2017-2019 F-Super Duty: Retrieve DTCs, Clean Actuator Cam And Replace Actuator Retest Function (Pass) (Do Not Use With Any Other Labor Operation)	202236A	0.4 Hrs.
2017-2019 F-Super Duty 40/20/40 Seat: Retrieve DTCs, Clean Actuator Cam And Replace Actuator Retest Function (Fail) Lubricate The Temperature Door Bearing Surfaces Includes Time To Remove And Install Climate Control Housing (Do Not Use With Any Other Labor Operation)	202236B	5.6 Hrs.
2017-2019 F-Super Duty With Console: Retrieve DTCs, Clean Actuator Cam And Replace Actuator Retest Function (Fail) Lubricate The Temperature Door Bearing Surfaces Includes Time To Remove And Install Climate Control Housing (Do Not Use With Any Other Labor Operation)	202236C	5.7 Hrs.
2017-2019 F-Super Duty 6.7L DI T 40/20/40 Seat: Retrieve DTCs, Clean Actuator Cam And Replace Actuator Retest Function (Fail) Lubricate The Temperature Door Bearing Surfaces Includes Time To Remove And Install Climate Control Housing (Do Not Use With Any Other Labor Operation)	202236D	5.3 Hrs.
2017-2019 F-Super Duty 6.7L DI T With Console: Retrieve DTCs, Clean Actuator Cam And Replace Actuator Retest Function (Fail) Lubricate The Temperature Door Bearing Surfaces Includes Time To Remove And Install Climate Control Housing (Do Not Use With Any Other Labor Operation)	202236E	5.4 Hrs.
2015-2019 F-150 40/40 Seat: Retrieve DTCs, Clean Actuator Cam And Replace Actuator Retest Function (Fail) Lubricate The Temperature Door Bearing Surfaces Includes Time To Remove And Install Climate Control Housing (Do Not Use With Any Other Labor Operation)	202236F	5.0 Hrs.
2015-2019 F-150 Console: Retrieve DTCs, Clean Actuator Cam And Replace Actuator Retest Function (Fail) Lubricate The Temperature Door Bearing Surfaces Includes Time To Remove And Install Climate Control Housing (Do Not Use With Any Other Labor Operation)	202236G	5.5 Hrs.
2015-2019 F-150 40/20/40: Retrieve DTCs, Clean Actuator Cam And Replace Actuator Retest Function (Fail) Lubricate The Temperature Door Bearing Surfaces Includes Time To Remove And Install Climate Control Housing (Do Not Use With Any Other Labor Operation)	202236H	5.2 Hrs.
2015-2019 F-150 Floor Shift: Retrieve DTCs, Clean Actuator Cam And Replace Actuator Retest Function (Fail) Lubricate The Temperature Door Bearing Surfaces Includes Time To Remove And Install Climate Control Housing (Do Not Use With Any Other Labor Operation)	202236J	5.6 Hrs.

Repair/Claim Coding

Causal Part:	19E616
Condition Code:	01

Service Procedure

- Using the datalogger on the IDS scan tool, pull up PIDs LEFT_BLEND# and RIGHT_BLEND# to monitor temperature door operation. The LEFT_BLEND# PID is for the driver's side and the RIGHT_BLEND# is for the passenger's side. Using the temperature knobs in the vehicle, change the temperature from LOW to HIGH and back to LOW and monitor the percentage for both PIDs. Do the PID percentages change from 0-1% up to 99-100%?

NOTE: For vehicles with manual climate control, both PIDs may not be present.

- Yes - this article does not apply, refer to Workshop Manual (WSM), Section 412-00.
 - No - proceed to Step 2.
- Proceed to the appropriate procedure based on the condition.
 - If either PID shows little to no percentage change, this is due a driver side temperature door actuator concern; complete Procedure A.
 - If either PID shows a percentage change through most of the range, but not all, this is due to a binding cam follower or temperature blend door; complete Procedure B.

Procedure A: Remove The Driver Side Temperature Blend Door Actuator

- Gently wipe the driver side temperature blend door actuator, cam, and cam follower attached to the climate control housing blend door to remove any debris and existing lubricant.

NOTE: Do not remove the cam follower from the climate control housing blend door. It is critical to be gentle when cleaning the cam follower as damaging the temperature blend door shaft will require replacement of the climate control housing. (Figure 1)



E339319

Item	Description
1	Temperature door actuator
2	Cam

3	Cam follower
4	Climate control housing

2. Replace the driver side temperature door actuator and cam. Refer to Workshop Manual (WSM), Section 412-00. Reapply fresh grease to the cam and cam follower pin using Motorcraft® HVAC Duct Component Grease.
3. Reassemble per WSM. Test the temperature blend door operation. Does the system operate properly?
 - (1). Yes - repair is complete.
 - (2). No - proceed to Procedure B.

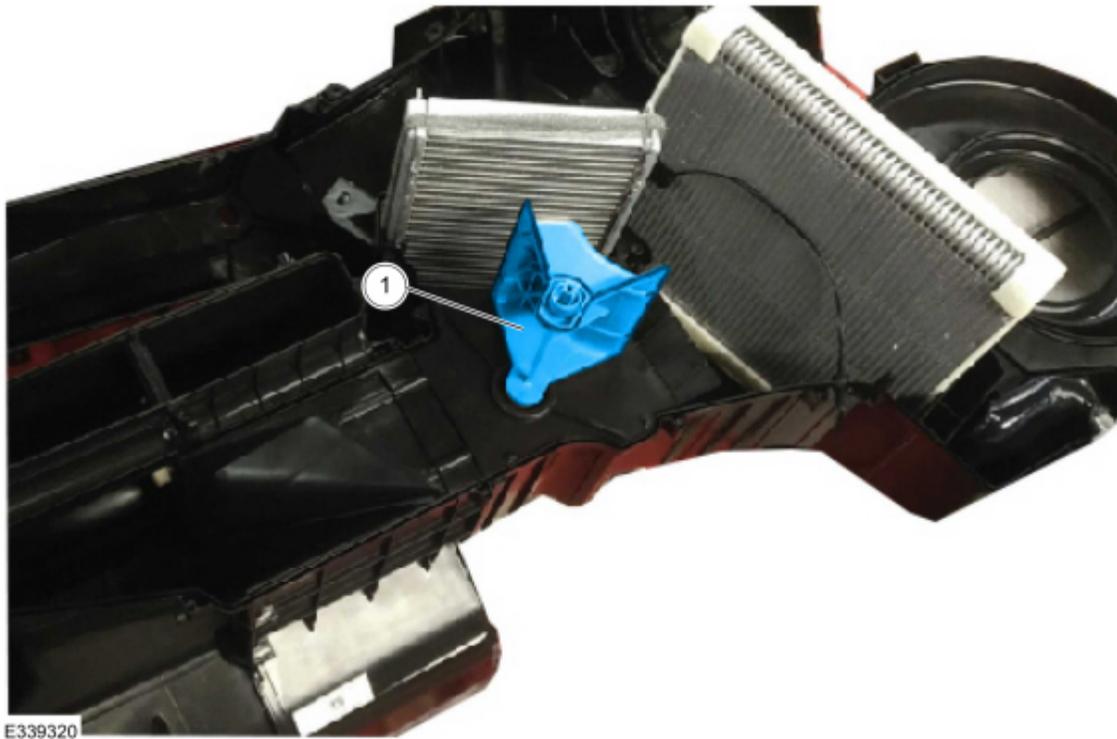
Procedure B: Lubricate The Temperature Blend Door Bearing Surfaces

1. Remove the climate control housing. Refer to Workshop Manual (WSM), Section 412-00.
2. Follow the evaporator removal procedure in WSM, Section 412-00 to separate the climate control housing for blend door lubrication. Only perform Steps 1-7 of the removal procedure. It is not necessary to remove the evaporator core.

NOTE: Both the top and bottom (if equipped) temperature door actuators will need to be removed from the climate control housing to allow for removal of the temperature blend doors for lubrication.

3. Remove the temperature blend door. (Figures 2-4)

Figure 2



Item	Description
1	Temperature blend door assembly

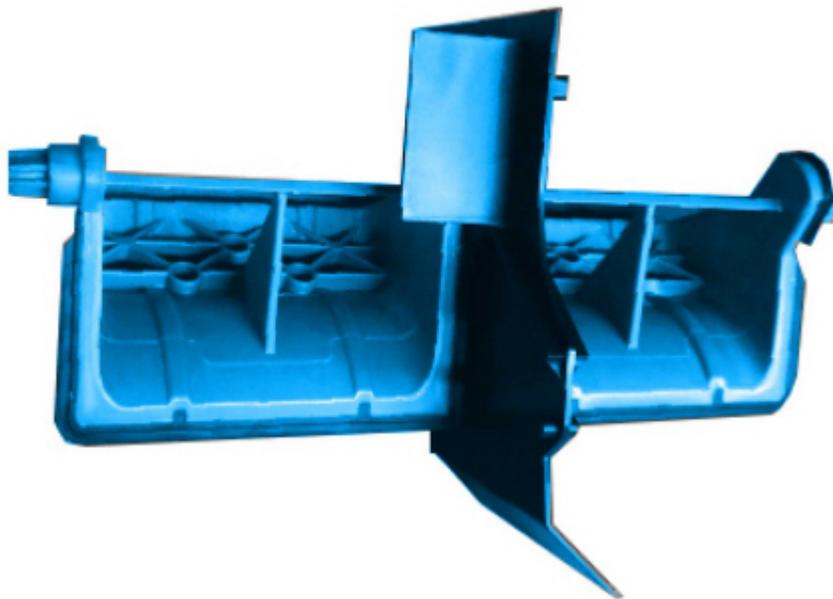
Figure 3



E339321

Item	Description
1	Temperature blend door assembly removed from climate control housing

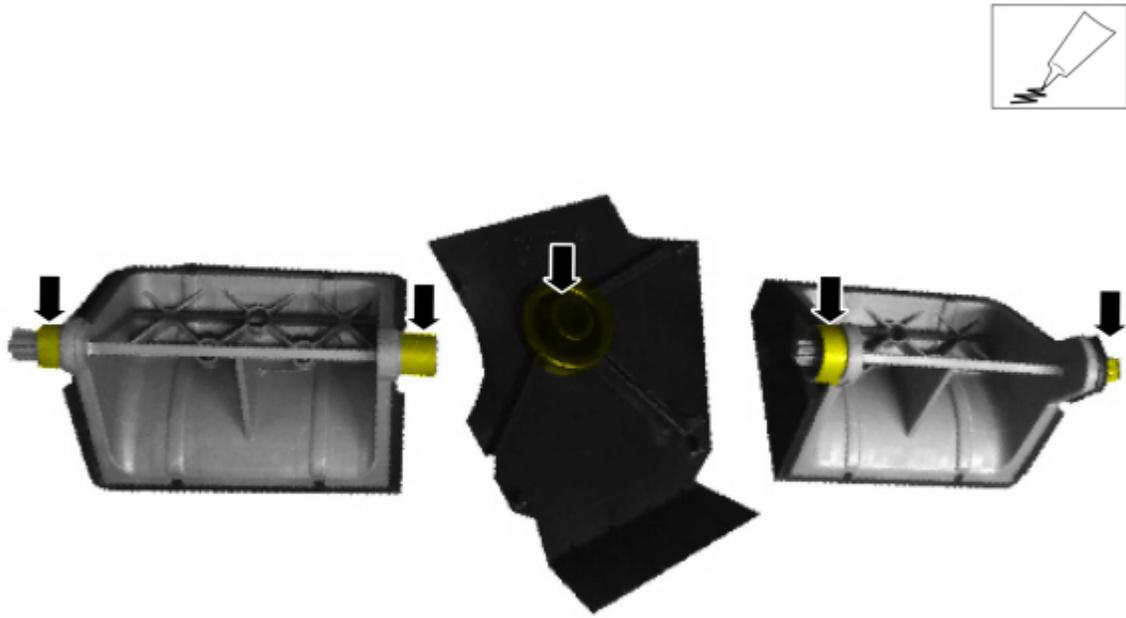
Figure 4 - Temperature blend door assembly



E339322

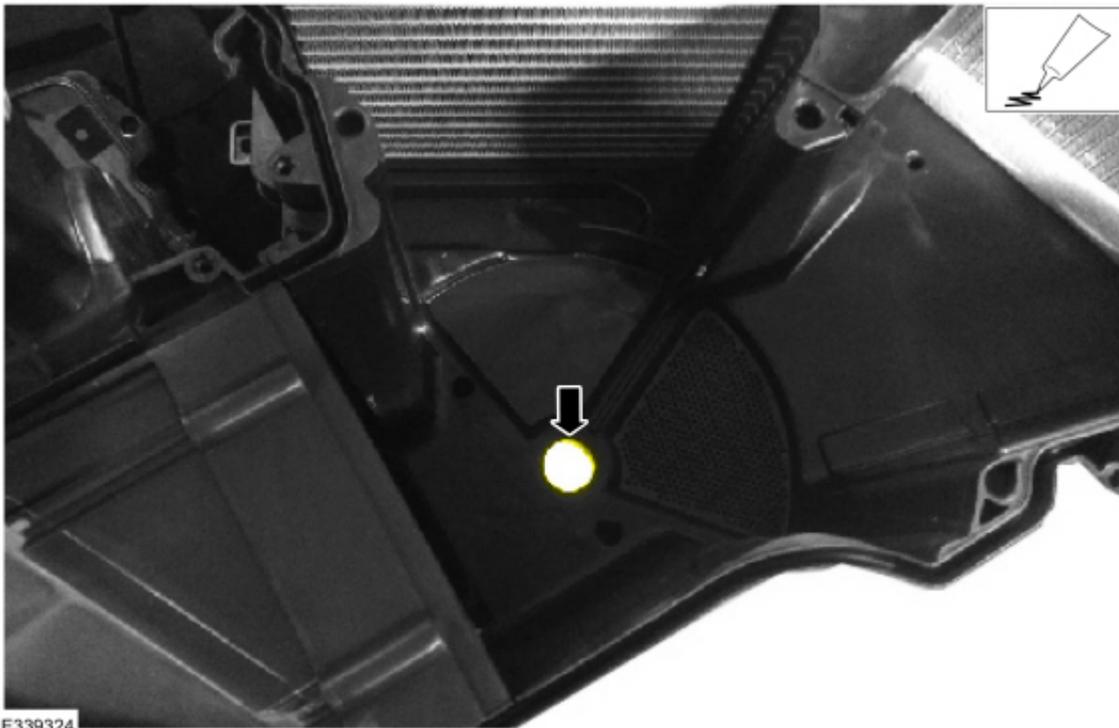
4. Lubricate the climate control housing and temperature blend door bearing surfaces with Motorcraft® HVAC Duct Component Grease. (Figures 5-7)

Figure 5 - Arrows indicate where to lubricate the temperature blend door bearing



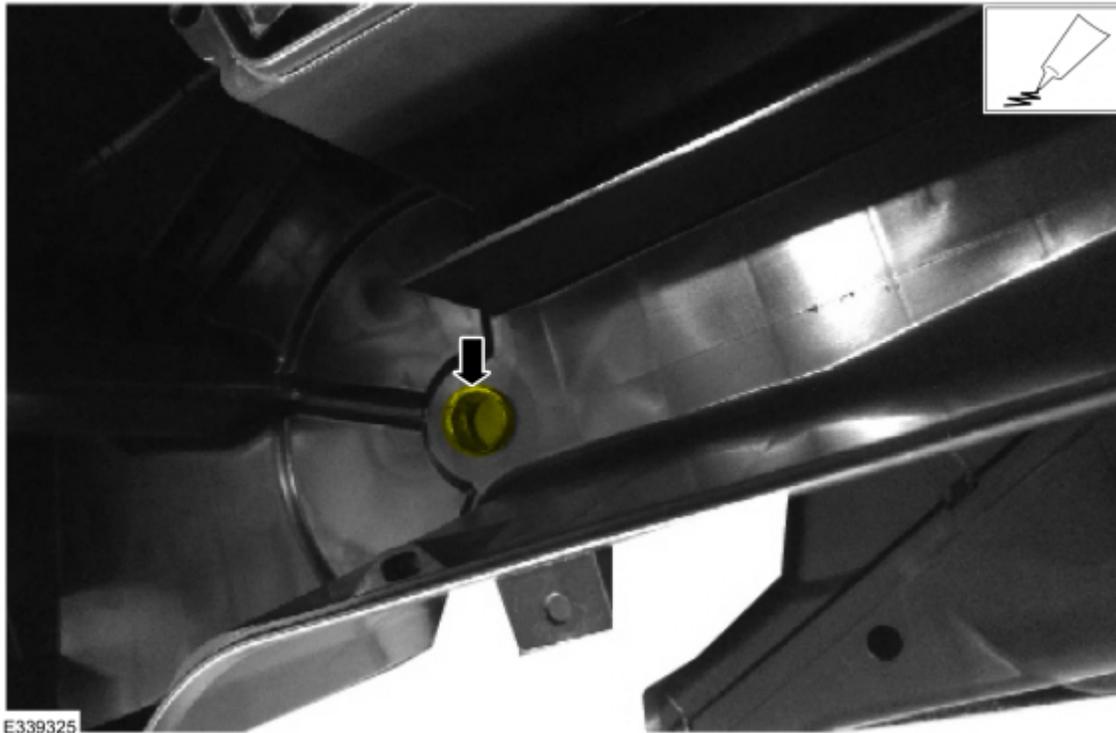
E339323

Figure 6 - Arrow indicates where to lubricate the climate control housing surface for the temperature blend door



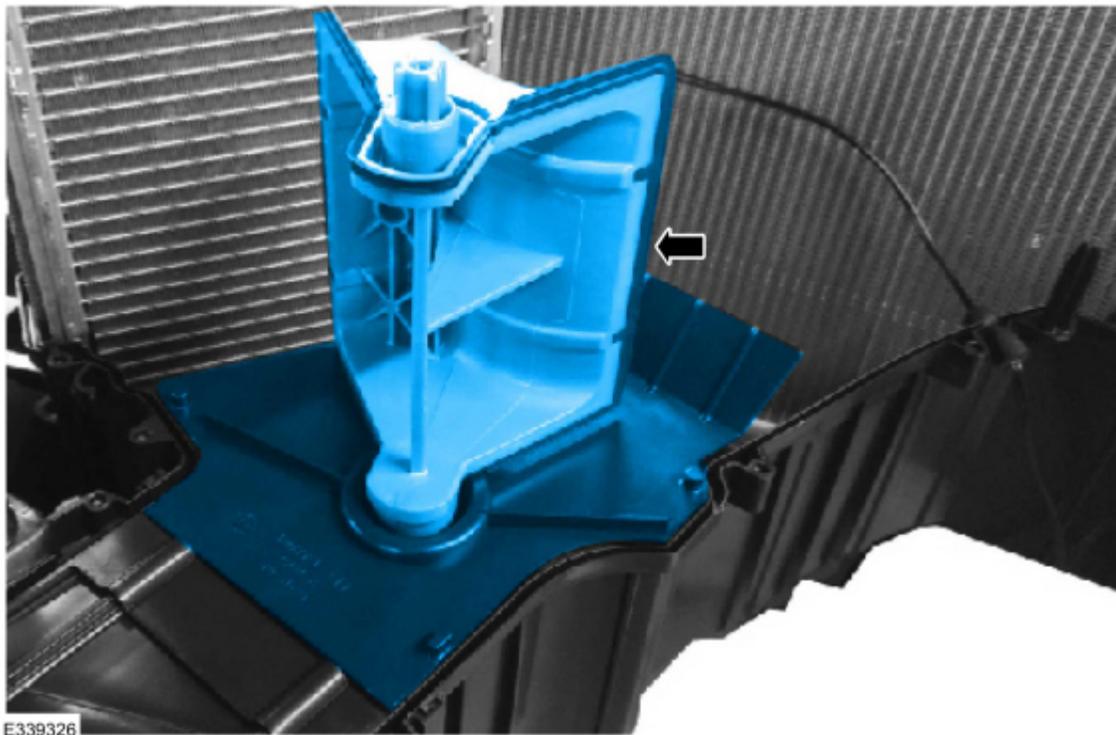
E339324

Figure 7 - Arrow indicates where to lubricate the climate control housing surface for the temperature blend door



5. Reassemble the temperature blend door halves and install back into the climate control housing. Make sure the temperature blend door support half is aligned using the dowel pins. (Figure 8)

Figure 8 - Highlighted area shows temperature blend door assembly properly installed back into the climate control housing



6. Reassemble the lower half of the climate control housing and perform Procedure A when installing the temperature blend door actuator(s), cam(s) and cam follower(s). Refer to WSM, Section 412-00, Installation procedure.

NOTE: F-150 vehicles have a seal near the thermostatic expansion valve (TXV) that may be damaged/crushed if the climate control housing is assembled improperly.

7. Reinstall the climate control housing into the vehicle. Refer to Workshop Manual (WSM), Section 412-00.

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NOTE: The information in Technical Service Bulletins is intended for use by trained, professional technicians with the knowledge, tools, and equipment to do the job properly and safely. It informs these technicians of conditions that may occur on some vehicles, or provides information that could assist in proper vehicle service. The procedures should not be performed by "do-it-yourselfers". Do not assume that a condition described affects your car or truck. Contact a Ford or Lincoln dealership to determine whether the Bulletin applies to your vehicle. Warranty Policy and Extended Service Plan documentation determine Warranty and/or Extended Service Plan coverage unless stated otherwise in the TSB article. The information in this Technical Service Bulletin (TSB) was current at the time of printing. Ford Motor Company reserves the right to supersede this information with updates. The most recent information is available through Ford Motor Company's on-line technical resources.